TANGIBLE RESULT #2

Use Resources Wisely

MDOT receives resources from our customers and they expect products and services in return. To better serve our customers, MDOT must maximize the value of every dollar we spend.

RESULT DRIVER:
Corey Stottlemyer
The Secretary's Office (TSO)

TANGIBLE RESULT DRIVER:
Corey Stottlemyer
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:
Dan Favarulo
The Secretary's Office (TSO)

PURPOSE OF MEASURE:
To track the efficiency of capital spending.

FREQUENCY:
Quarterly

DATA COLLECTION METHODOLOGY:
Track capital project spending versus the Consolidated Transportation Plan appropriated funds.

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 2.1
Percent Capital Dollars Spent as Programmed

The purpose of this measure is to show MDOT's customers that each TBU is spending its forecasted capital dollars on a quarterly basis with the goal of efficiently meeting its allocation by the end of the fiscal year. Dollars spent divided by dollars appropriated will be compared to the same time period from previous fiscal years.

As of the 2017 2nd quarter, MDOT's capital program spending rate was at 40 percent of Consolidated Transportation Program forecasted funds expended, which is 1 percent higher than the historical average of 39 percent expended at this time of year. MDOT's latest capital forecast is predicting a 96 percent expenditure rate in FY 2017.

Chart 2.1.1: 6 Year Expenditure Rate Analysis (Federal & State)
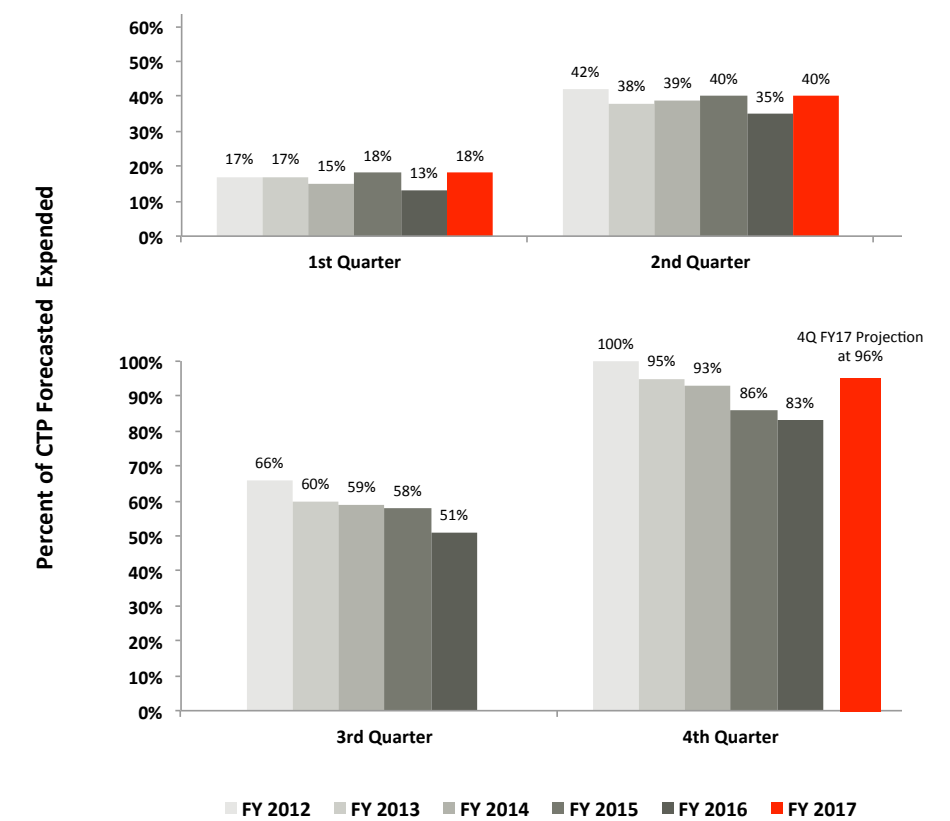
PERFORMANCE MEASURE 2.1
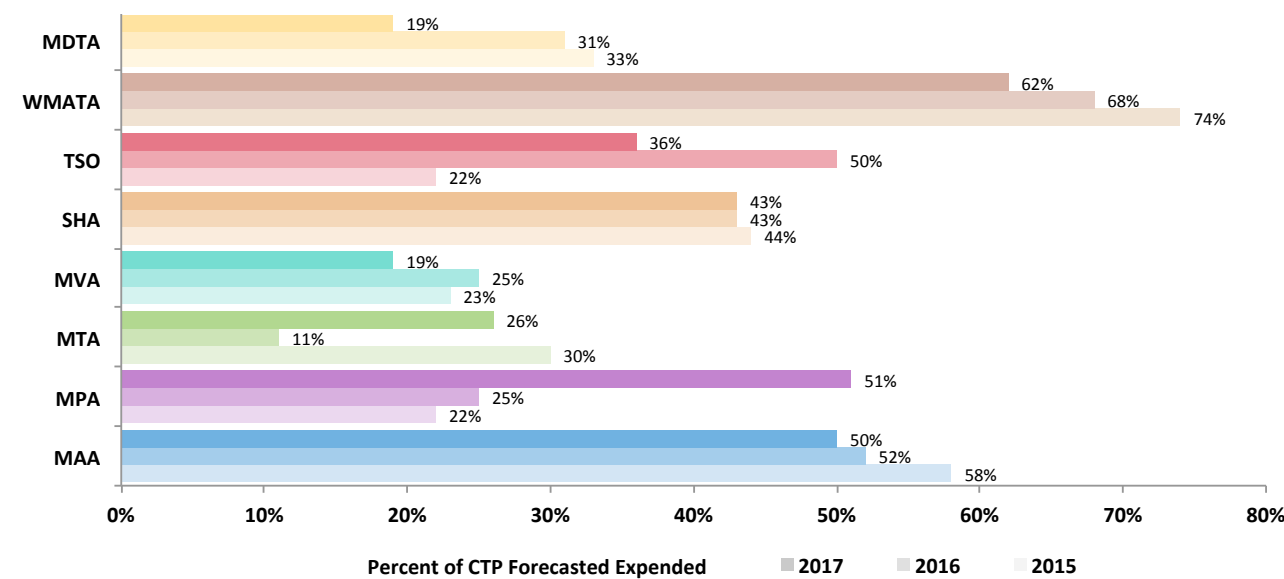## Percent Capital Dollars Spent as Programmed

MDOT is currently projected to expend $100 million less than the $2.8 billion originally forecasted in the Final FY16-21 CTP for FY 2017. This decrease is a result of funding deferrals due to reductions in revenue forecasts as well as some major project cash flow adjustments.

Chart 2.1.2: FY17 CTP Forecasted vs 4Q Projected Amounts
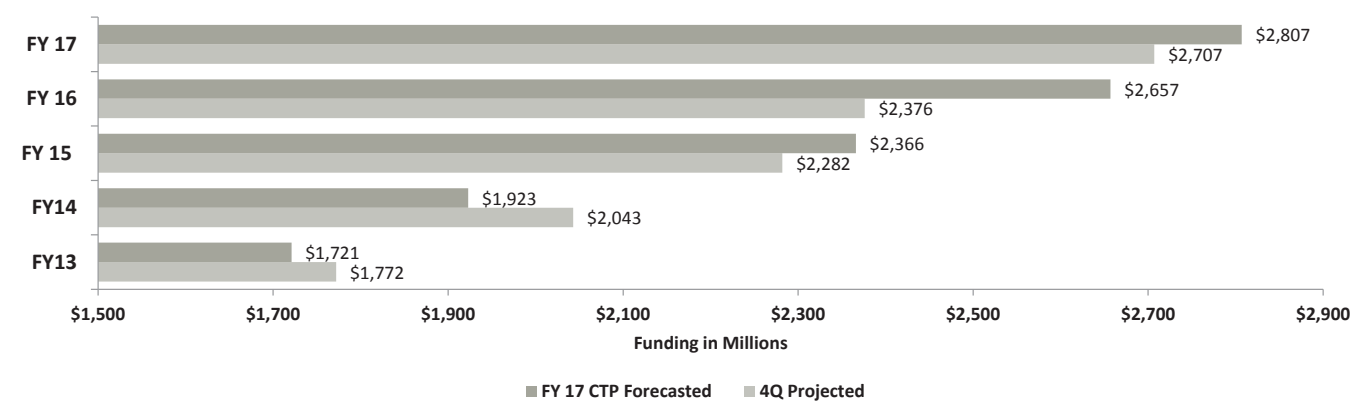
Below is a breakdown by each TBU of where they are now compared to the historic percent expended at the 2nd Quarter Mark.

Chart 2.1.3: 3 Yr Expenditure Rate by TBU at 2Q

PERFORMANCE MEASURE 2.1
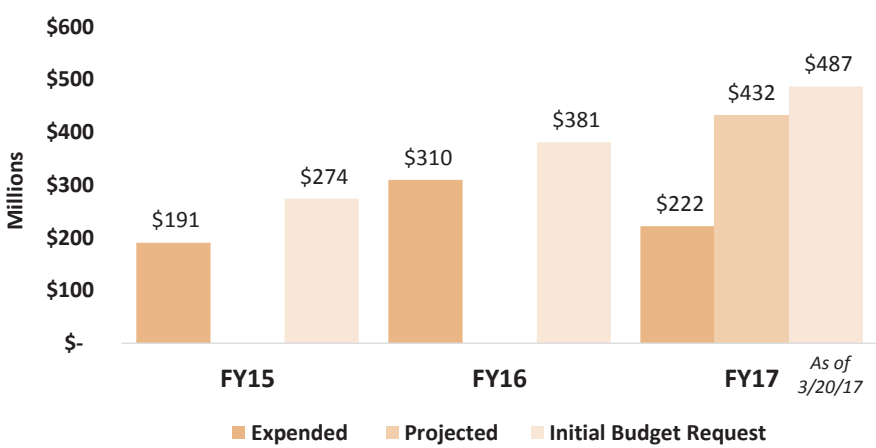## Percent Capital Dollars Spent as Programmed

SHA is a major contributing factor to the overall MDOT expenditure rate due to the size and scope of its program. As a result, keeping a pulse on expenditure rates by the different SHA Fund Programs will proactively monitor for any early warnings. Currently all large programs are meeting or exceeding their expenditure rates for this time of year. Due to the mild winter, expenditure rates are expected to continue to exceed historical averages.

Chart 2.1.4: SHA - 2Q Mark Expenditure Rates By Program
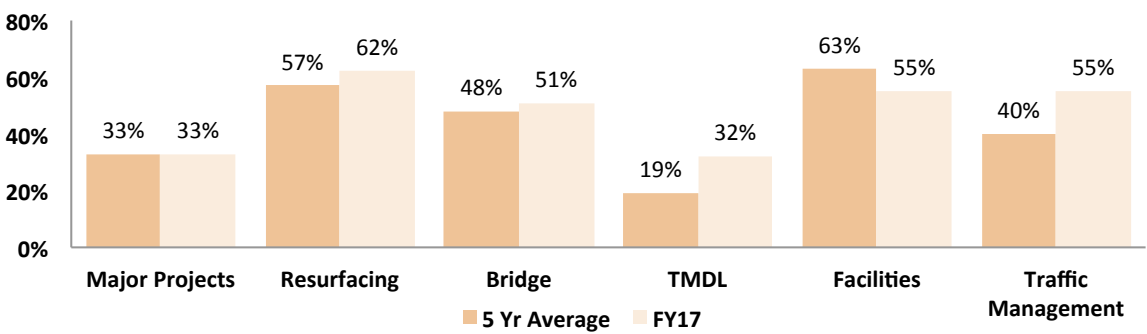
SHA's major project is currently trending at the average for the 2nd Quarter. The latest forecasted amount for major projects is $50 million lowered than originally forecasted in the FY16-21 CTP due to several large project schedule changes and revised estimates. Review of spending peformance has indicated that construction algorithm forecasts are accurate but due to several large project changes and uncertain utility expense forecasts, projections have been off over the last few years.

Chart 2.1.5: SHA Major Projects - Budgeted vs. Expended (Federal & State) FY2015-FY2017
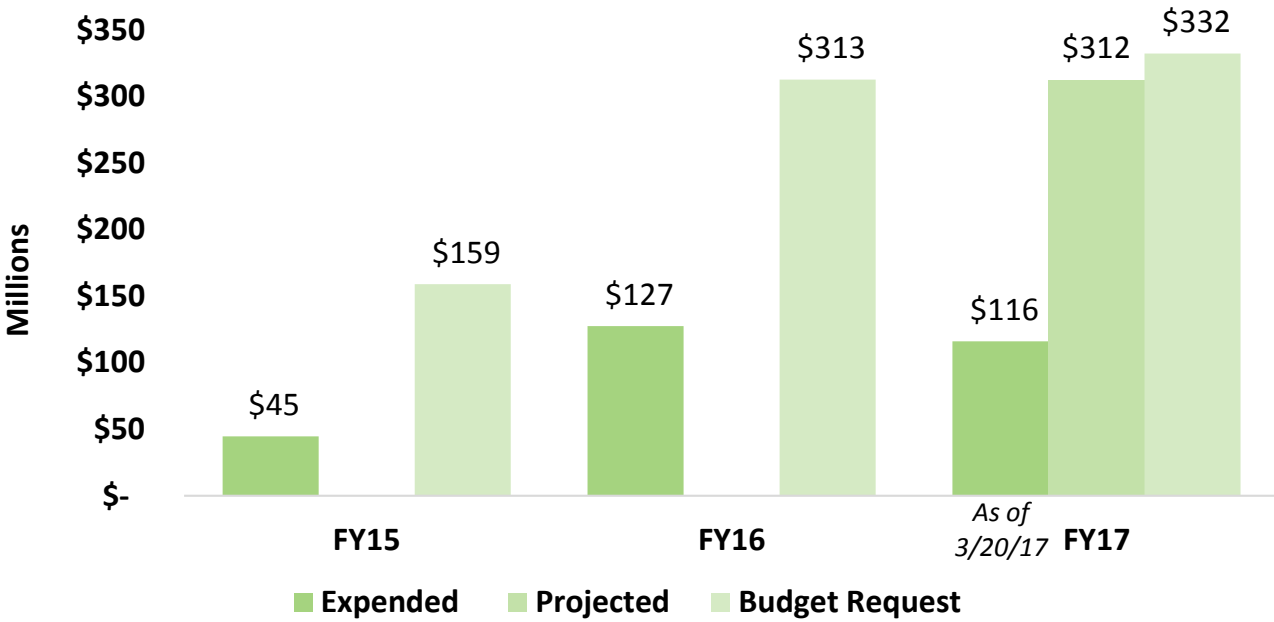
PERFORMANCE MEASURE 2.1
Percent Capital Dollars Spent as Programmed

MTA's Purple Line project is roughly 15 percent of the total MDOT program and greatly affects MDOT's overall expenditure rate. Monitoring this project will provide early warnings of hitting budget projections. This project has historically missed funding targets. The Purple Line has currently spent 35 percent of the FY16-21 CTP forecasted amount in FY 2017 and has already expended almost as much as was expended in FY16. Spending peformance looks like it is trending up but current litigation will impact the remaining year spending performance.

Chart 2.1.6: Purple Line Budgeted vs. Expended (Federal & State) FY2015-FY2017

Millions

	FY15	FY16	FY17 (As of 3/20/17)
Expended	$45	$127	$116
Projected			$312
Budget Request	$159	$313	$332

■ Expended ■ Projected ■ Budget Request

TANGIBLE RESULT DRIVER:
Corey Stottlemyer
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:
Dan Favarulo
The Secretary's Office (TSO)

PURPOSE OF MEASURE:
To measure the amount of other sources of dollars utilized to fund capital projects as an indicator of MDOT's efforts to leverage its finite resources.

FREQUENCY:
Annually (in April)

DATA COLLECTION METHODOLOGY:
This measure will track county/local contributions, private contributions, and federal discretionary funding received each year towards projects.
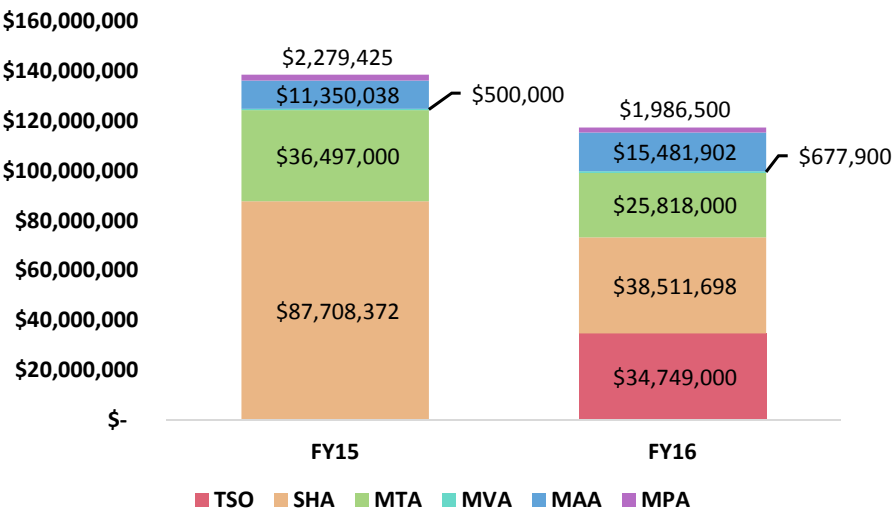
NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 2.2
Percent of Projects Leveraging Other Funding Sources

The purpose of this measure is to track and highlight incidences to leverage Transportation Trust Fund (TTF) dollars with local and private dollars to better understand how MDOT is using its finite financial resources.

MDOT leveraged $117 million in other funding in FY 16. This represents roughly 5 percent of the total FY17 capital program expended. Most of this funding was leveraged by SHA through private contributions, MTA through Purple Line enabling projects, as well as TSO through the award of discretionary funding for the Maglev project.
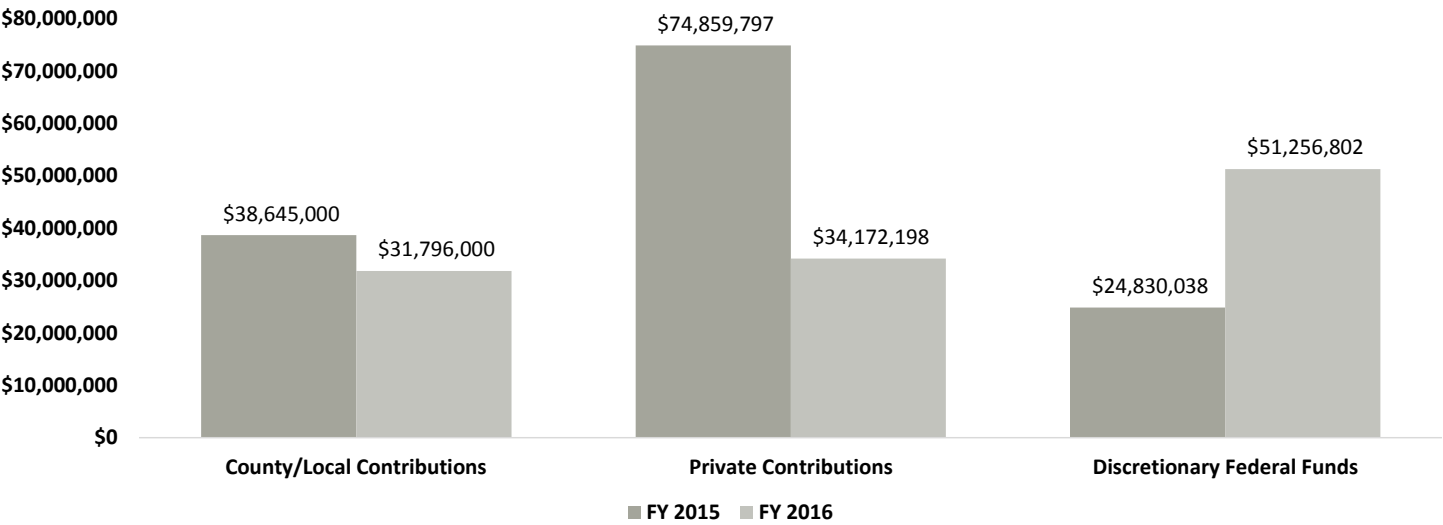
Chart 2.2.1: Other Funding Leveraged by TBU FY2015-FY2016

	FY15	FY16
TSO		$34,749,000
SHA	$87,708,372	$38,511,698
MTA	$36,497,000	$25,818,000
MVA	$500,000	$677,900
MAA	$11,350,038	$15,481,902
MPA	$2,279,425	$1,986,500

■ TSO ■ SHA ■ MTA ■ MVA ■ MAA ■ MPA

PERFORMANCE MEASURE 2.2
Percent of Projects Leveraging Other Funding Sources

Of the $117 million in other funding leveraged in FY16, $51 million was received from successfully competing for discretionary federal funding. Another $34 million was leveraged from private contributions towards roadway improvements on SHA right-of-way. This is down from $74 million in FY15. In addition, there was another $32 million in local/county contributions in the form of funding or enabling projects.

Chart 2.2.2: Amount of Other Funding Leveraged By Source FY2015-FY2016

County/Local Contributions: FY 2015 = $38,645,000; FY 2016 = $31,796,000
Private Contributions: FY 2015 = $74,859,797; FY 2016 = $34,172,198
Discretionary Federal Funds: FY 2015 = $24,830,038; FY 2016 = $51,256,802

■ FY 2015   ■ FY 2016

TANGIBLE RESULT DRIVER:
Corey Stottlemyer
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:
Amber Harvey
Maryland Transportation Authority (MDTA)

PURPOSE OF MEASURE:
To track the commitment of employees in furthering MDOT's reputation, mission and interests by identifying key motivators and obstacles in the workplace.

FREQUENCY:
Annually

DATA COLLECTION METHODOLOGY:
Develop and implement one MDOT employee engagement survey administered to all employees. Online and hard copies will be made available. Cloud-based and mobile platforms are a consideration.

NATIONAL BENCHMARK:
*GALLUP 2015 national engagement percentages:

32 percent engaged employees

50.8 percent not engaged

17.2 percent actively disengaged

PERFORMANCE MEASURE 2.3
Employee Engagement

Engagement accounts for the emotional commitment an employee has for MDOT and the amount of discretionary effort the employee expends on behalf of MDOT. Engaged employees go beyond what they "have to do" to what they "want to do" for MDOT and its customers.

MDOT embarked on its first ever department-wide Employee Feedback Survey that will:

• Eliminate redundant efforts and minimize expense by combining talent and resources;

• Ensure a systematic and consistent approach to employee engagement across all MDOT business units;

• Accurately gauge the workforce climate to develop and prioritize new business strategies and;

• Be a feasible, flexible and sustainable resource for future use.

MDOT partnered with Towson University's Regional Economic Studies Institute (RESI) to develop and administer the feedback survey across all TBUs and the more than 10,000 workforce. The survey was open January 10, 2017 – February 7, 2017 with online and paper options available. As shown in Table 2.3.1, nearly 4,500 employees participated in "Shaping the Future of MDOT, Together" for a 44.5% total response rate. MDOT is greatly encouraged by the participation and collaboration in this initiative. Table 2.3.2 gives an overview of the response rates from similar surveys administered by other state governments.

RESI is currently completing its analysis with a final report due in May.

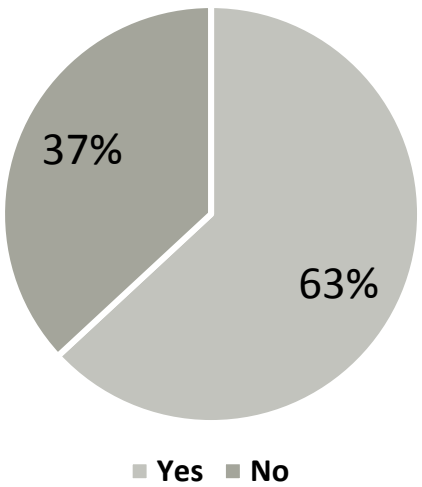**PERFORMANCE MEASURE 2.3**
Employee Engagement

Table 2.3.1: 2016 MDOT Employee Feedback Survey Response Rates

TBU	Number of Survey Responses	Number of Employees	Response Rate
MAA	248	471	52.7%
MPA	136	192	70.8%
MTA	803	3,202	25.1%
MVA	690	1,628	42.4%
SHA	1,382	2,701	51.2%
MDTA	659	1,561	42.2%
TSO	172	286	60.1%
No TBU Selected	374	N/A	N/A
TOTAL	**4,464**	**10,041**	**44.5%**

Table 2.3.2: Survey Response Rates for Other Government Systems

Entity	Year	Completed Surveys	Response Rate
California	2015	2,604	52%
Illinois	2015	19,380	39.9%
Illinois Department of Transportation	2015	–	33.9%
Michigan	2015	31,833	71%
Michigan Department of Transportation	2015	2,046	75%
Vermont	2016	4,506	55.7%
Vermont Department of Transportation	2016	524	50.6%
Washington	2015	42,669	72%
Washington Department of Transportation	2015	3,360	49%
Federal	2016	407,789	45.8%
Federal Department of Transportation	2016	14,871	49.8%

Chart 2.3.1: Would you consider MDOT to have a positive workplace environment?

37%

63%

■ Yes ■ No

TANGIBLE RESULT DRIVER:
Corey Stottlemyer
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:
Amber Harvey
Maryland Transportation Authority (MDTA)

PURPOSE OF MEASURE:
To identify the percentage of employees who leave MDOT and analyze trends in voluntary and involuntary separations.

FREQUENCY:
Quarterly

DATA COLLECTION METHODOLOGY:
Quarterly reports of employee separations are provided by TSO HRIS Unit. These reports show the number of separations during a given period of time for each TBU broken down by all available separation codes (i.e. reasons).

NATIONAL BENCHMARK:
U.S. Department of Labor (DOL) Bureau of Labor Statistics for U.S. State and Local Governments

PERFORMANCE MEASURE 2.4
Employee Turnover Rate

Annual employee turnover rate is the ratio of total separations, both voluntary and involuntary, compared to the average number of employees during the given timeframe, expressed as a percentage. The Human Resource Information System (HRIS) Unit in the Human Resources Division of the TSO provided the total number of employees and total number of separations for each TBU on a quarterly basis. The national benchmark was determined by utilizing the U.S. Bureau of Labor Statistics Job Opening and Labor Turnover Survey (JOLTS) data for U.S. state and local governments (excluding education, seasonally adjusted) total employee separations.

Chart 2.4.1 compares the turnover rate of each TBU for the 2nd quarter (Q2) of FY 2016 and 2017. Chart 2.4.2 compares the MDOT total turnover rate to the national average for state and local governments. MDOT remains consistently below the national average, which reflects a positive trend for MDOT.

PERFORMANCE MEASURE 2.4
Employee Turnover Rate

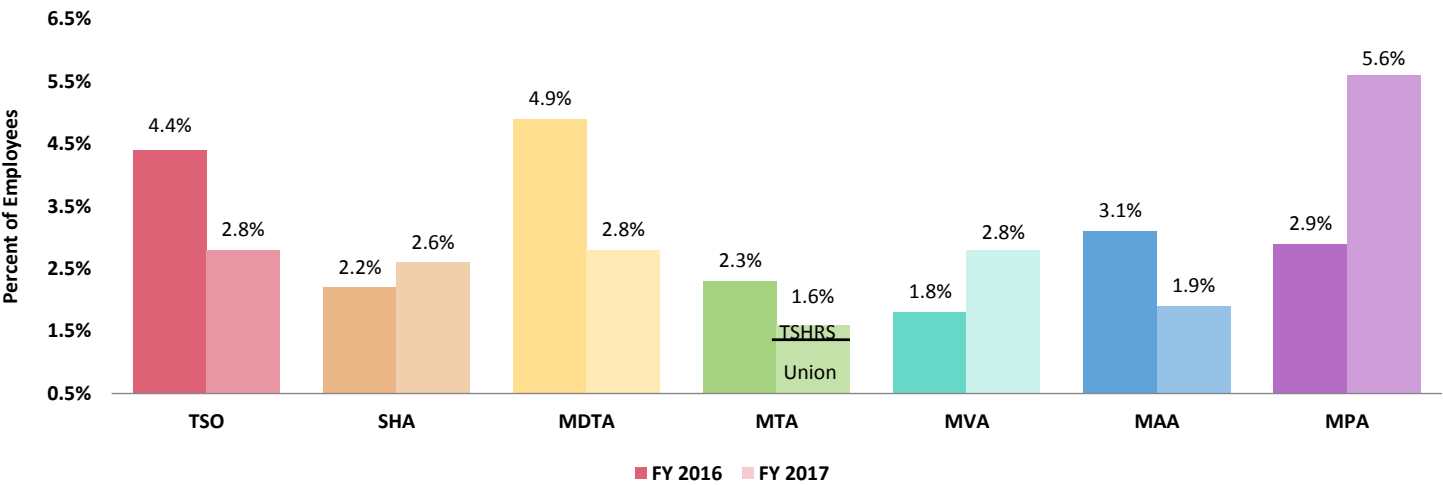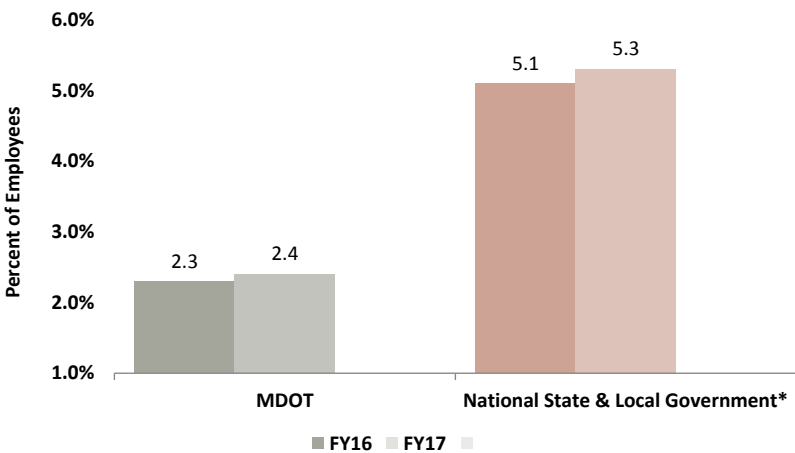**Chart 2.4.1: TBU Employee Turnover Rate Seasonal Comparison of 2nd Quarter 2016 vs. 2017**

■ FY 2016   ■ FY 2017

Chart 2.4.2: Employee Turnover Rate Seasonal Comparison of 2nd Quarter 2016 vs. 2017

■ FY16   ■ FY17

PERFORMANCE MEASURE 2.4
Employee Turnover Rated

One notable element that continues to be important in analyzing MDOT turnover is the employee separations that occur within one year from the date of hire. The following chart illustrates the number of newly hired employees that have separated from MDOT in comparison to all other separations occurring in Q2 of FY 2017. This data reflects that approximately 16% percent of all employee separations during this timeframe occurred within the first year of hire. This is a 3% decrease from Q1 of FY 2017 which reflects a positive trend for MDOT.

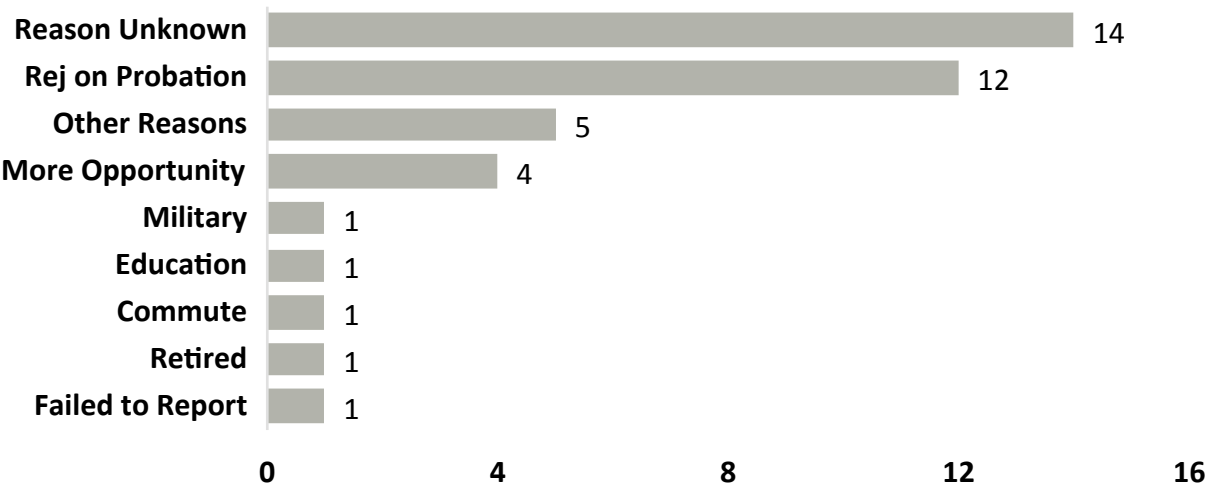**Chart 2.4.3: FY2017 Q2 Employee Separations**

■ Within 1 year of hire   ■ All Other Separations
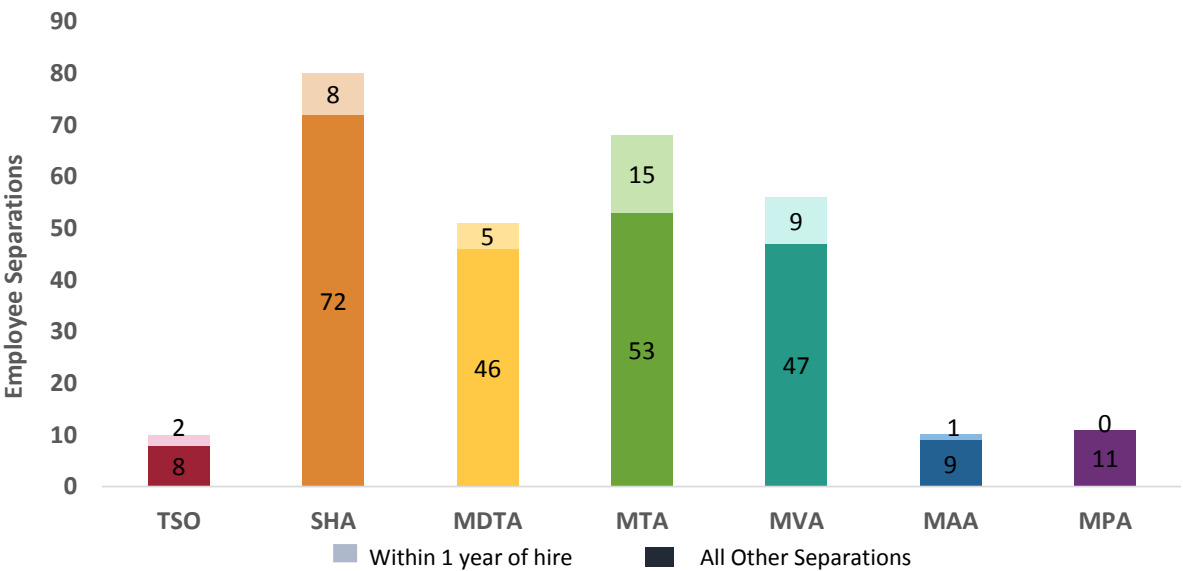
PERFORMANCE MEASURE 2.4
Employee Turnover Rate

Several action strategies are underway to address employee turnover concerns. In October 2016, MDOT and MTA successfully identified and resolved a payroll system coding limitation that now allows the appropriate reason for separation to be tracked for all MTA employees, including TSHRS and union employees. Properly identifying the reason these employees choose to leave MDOT is a crucial factor in developing successful business practices to retain a healthy workforce and lower turnover costs. In addition, MDOT and TSO collected exit interview procedures and materials from all TBUs and a review of these materials is underway to determine best practices and areas for improvement. MDOT and TSO are also leading the effort to develop a MDOT employee separation policy to document and standardize necessary procedures.

Chart 2.4.4: FY2017 Q2 Separations Within 1 Year of Hire

Reason	Value
Reason Unknown	14
Rej on Probation	12
Other Reasons	5
More Opportunity	4
Military	1
Education	1
Commute	1
Retired	1
Failed to Report	1

TANGIBLE RESULT DRIVER:
Corey Stottlemyer
The Secretary's Ofice (TSO)

PERFORMANCE MEASURE DRIVER:
Deborah Hammel
State Highway Administration (SHA)

PURPOSE OF MEASURE:
To demonstrate efficient use of available positions and identify opportunities for improvement in recruitment and selection processes.

FREQUENCY:
Quarterly

DATA COLLECTION METHODOLOGY:
Quarterly report for MDOT and each TBU from HRIS housed at TSO and spreadsheets completed by TBU Human Resource Offices.

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 2.5
Time to Fill Vacancies

Reducing the time it takes to fill vacant positions will increase MDOT's staffing levels, improving the ability to deliver projects on time and rapidly address emergencies affecting the transportation system.

This is the second quarter of collecting data by TBU. Despite the elimination of the Hiring Freeze Exemption Process, the overall time to fill vacancies increased from 149.6 days in FY17 Q1 to 176.12 days in FY17 Q2.

Average time to fill vacancies decreased in the following TBUs:

> MPA – from 167.3 to 161.3 days
> MTA-Career Service – from 154.6 to 147.2 days
> TSO – from 211.2 to 182.5 days

Average time to fill vacancies increased in the following TBUs:

> MAA – from 121.9 to 225 days
> MTA-Union – from 45.3 to 114.8 days
> MVA – from 82 to 82.9 days
> SHA – From 223.1 to 252.6 days
> MDTA – from 191.6 to 242.8 days

Recruitment process efficiencies are influenced by a variety of sources such as Human Resource staffing levels and fluctuations in the number of vacancies. Additional challenges such as poor applicant response and an increase in the number of vacant positions which require one or more studies of the position description add time to the overall process. MDOT is in the process of procuring a new Human Resource Information System (HRIS) which may allow greater automating of the recruitment process.

In the interim MDOT will continue to look for opportunities to improve, such as:

• Hiring managers may have up to four selectable candidates approved for hire from one set of interviews rather than submitting each candidate for individual approval.

• SHA is piloting a manager's review of career service candidates who do not meet the qualifications for the vacant position to insure candidates are dispositioned appropriately and to help hiring managers refine their selective qualifications for recruitments.

PERFORMANCE MEASURE 2.5
Time to Fill Vacancies
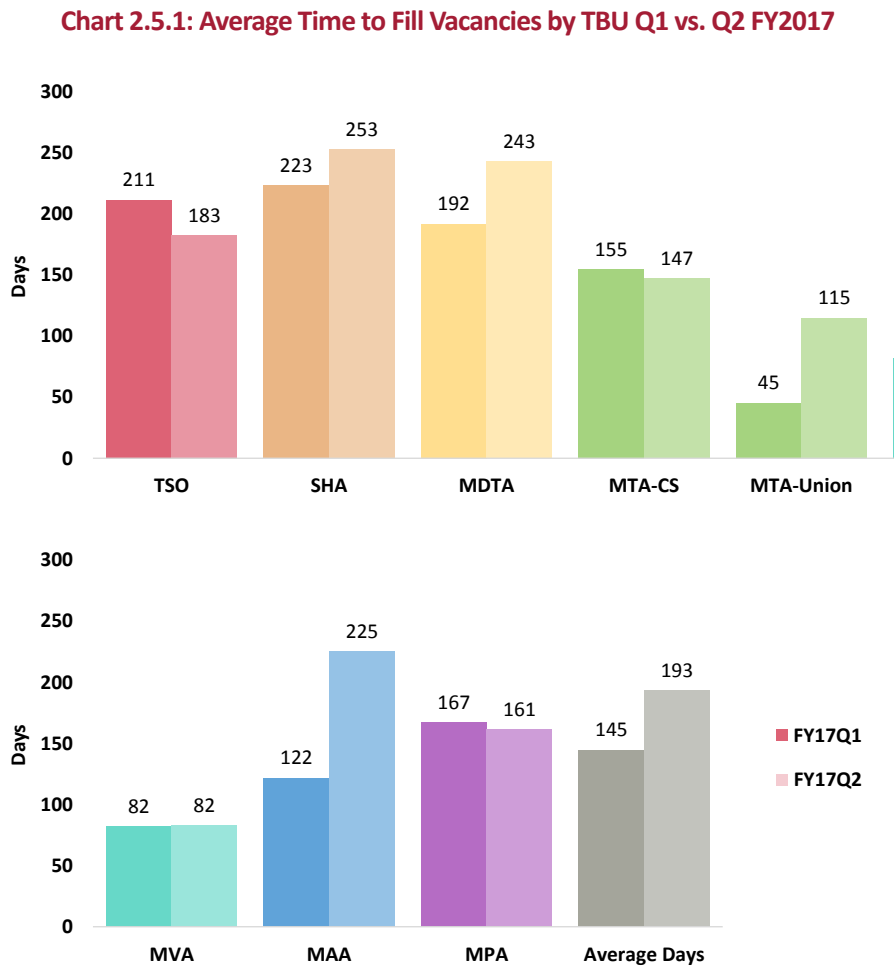
Chart 2.5.1: Average Time to Fill Vacancies by TBU Q1 vs. Q2 FY2017

PURPOSE OF MEASURE:
To calculate the percentage of Fixed Asset Units counted during the Annual Physical Inventory of Fixed Assets as an indicator of how well MDOT records, safeguards, and efficiently controls fixed assets.

FREQUENCY:
Annually (in October)

DATA COLLECTION METHODOLOGY:
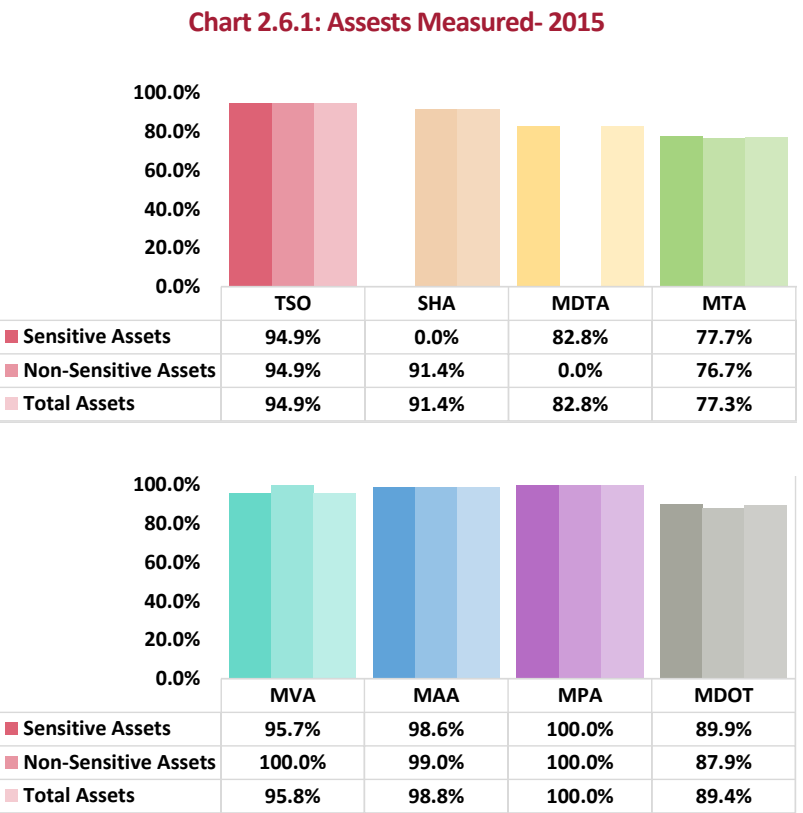Data will be collected when the business units conduct annual fixed asset physical inventories.

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 2.6
Percentage of Fixed Asset Units Identified or Accounted for During the Annual Physical Inventory of Fixed Assets

This performance measure is intended to emphasize the importance of stewardship and internal controls with respect to fixed assets owned by each of MDOT's business units. This performance measure reports the percentage of fixed assets counted by each TBU during its annual fixed asset physical inventory versus the number of fixed assets recorded in each business unit's official inventory records.

A regularly-conducted physical inventory of fixed assets ensures accurate information for the management of assets and discourages fraud.

Currently, five of seven business units conduct a full inventory of non-sensitive items once every three years and a full inventory of sensitive items annually. The remaining business units, MAA and SHA, conduct a full inventory of both sensitive and non-sensitive items annually.

Chart 2.6.1: Assests Measured- 2015

	TSO	SHA	MDTA	MTA
Sensitive Assets	94.9%	0.0%	82.8%	77.7%
Non-Sensitive Assets	94.9%	91.4%	0.0%	76.7%
Total Assets	94.9%	91.4%	82.8%	77.3%

	MVA	MAA	MPA	MDOT
Sensitive Assets	95.7%	98.6%	100.0%	89.9%
Non-Sensitive Assets	100.0%	99.0%	100.0%	87.9%
Total Assets	95.8%	98.8%	100.0%	89.4%

TANGIBLE RESULT DRIVER:
Corey Stottlemyer
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:
Tony Moore
Maryland Port Administration (MPA)

Nicole Katsikides
State Highway Administration (SHA)

PURPOSE OF MEASURE:
Provide an overview which shows how TBUs monitor asset management activities.

FREQUENCY:
Annually

DATA COLLECTION METHODOLOGY:
Asset inspection condition and asset life-cycle cost analyses are compiled at the TBU level.

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 2.7
Managing Capital Assets

Our customers deserve to know that MDOT is strategically managing its diverse capital assets. Each TBU maintains its physical assets according to policies that minimize asset life-cycle cost while avoiding negative impacts on the delivery of transit services.

MTA, SHA, MAA, MDTA and MPA perform annual bridge inspections per Federal guidelines to assess a rating, which is used to determine if any remedy is required to keep bridges structurally sound.

SHA and MDTA monitor the condition of pavement and road ride smoothness. It is based upon the International Roughness Index (IRI) Pavement Criteria, which is the most commonly used measure worldwide for evaluating and managing road systems. Monitoring is performed using annual road inspections.

MTA monitors rail conditions for MTA Metro and Light Rail systems using TERM Lite evaluation software to evaluate guideway, track work and special structures. Evaluation will occur during an annual asset inventory.

MPA utilizes U.S. Army Corps of Engineers bay channel annual inspection surveys to monitor the dredging depth for shipping access channels to the Port of Baltimore.
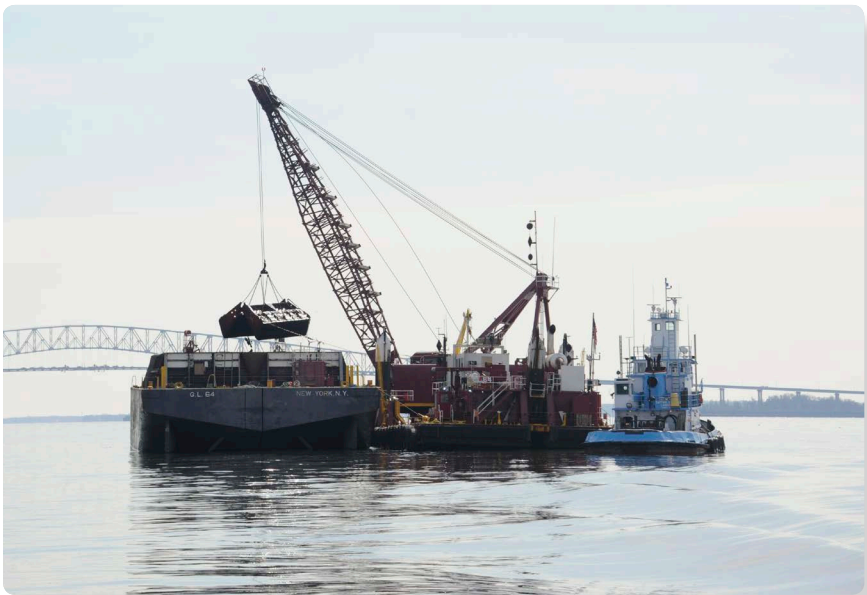
TBU	Active Asset Mgt	Criteria Basis	Assets Managed	Inspection Intervals	Performance Measures
Multiple	Yes	Bridge condition	Structurally deficient bridges	Annual	2.7a - % of structurally deficient bridges
MTA	Yes	Rail condition	Light and heavy rail	Annual	2.7c - % of MTA owned rail in good quality based on FTA ranking guide lines
SHA/MDTA	Yes	Roadway ride condition	Roadways - With acceptable (smooth) rides	Annual	2.7b - % of roadway miles with acceptable (smooth) ride quality
SHA	Yes	Interstate pavement condition (good or not good)	Interstates and non-interstate pavement	Annual	2.7e/2.7f - % of interstate and non-interstate pavement which are in good condition
MPA	Yes	Bay channel dredging priority	Shipping channel depth	Annual	2.7d - % of channel depth inspections

Chart 2.7A.1: Number and Percent of Structurally Deficient Bridges
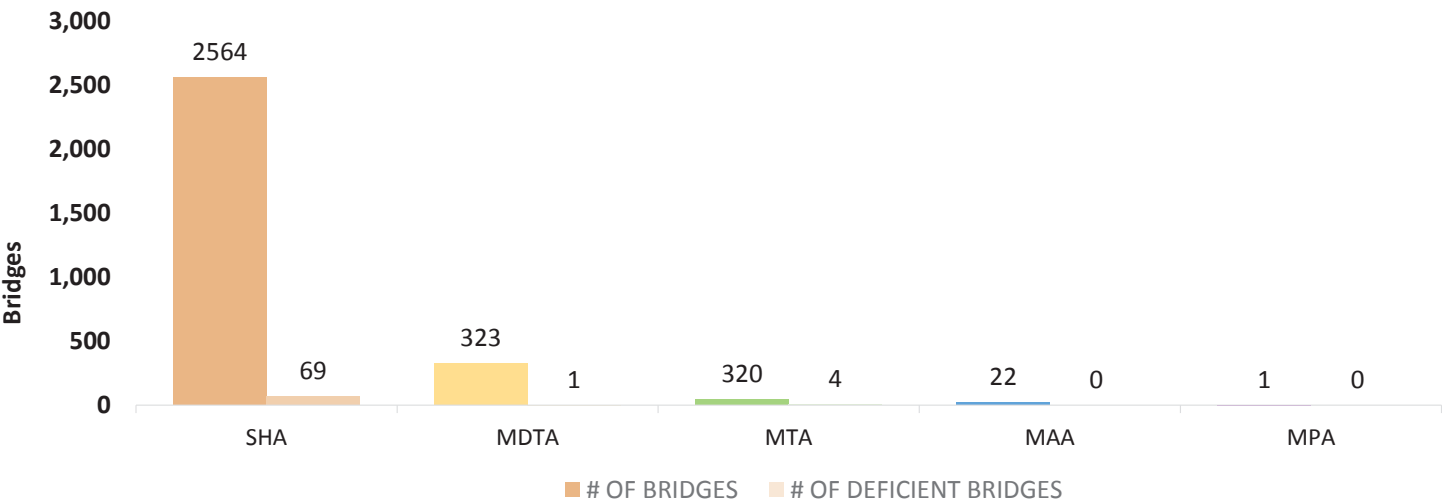
PERFORMANCE MEASURE 2.7
Managing Capital Assets

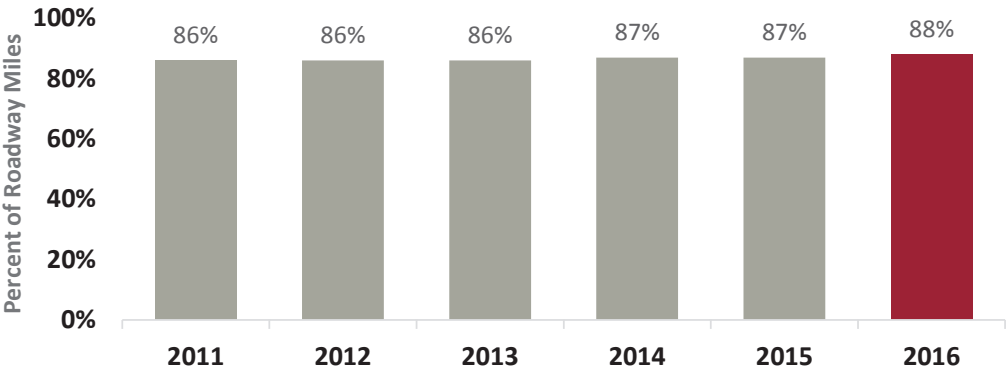Chart 2.7B.1: Percent of SHA and MDTA Roadway Miles with Acceptable (Smooth) Rides 2011-2016

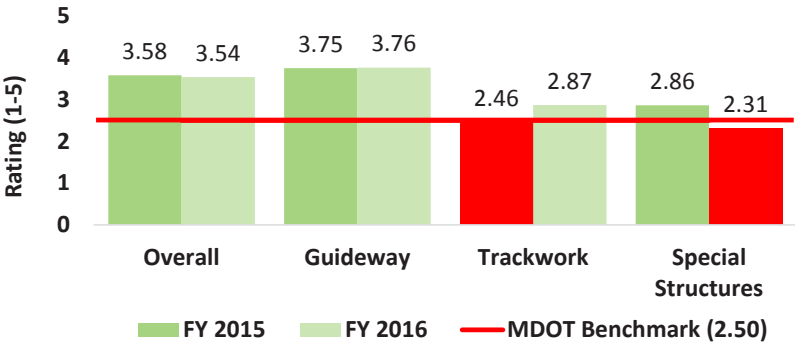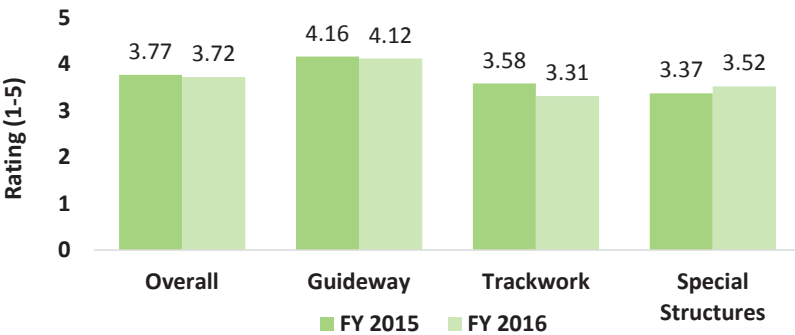Chart 2.7C.1: Rating of Baltimore Metro Rail in "Good" Condition (>2.5) FY2015-FY2016

Chart 2.7C.2: Rating of Light Rail in "Good" Condition (>2.5) FY2015-FY2016

PERFORMANCE MEASURE 2.7
Managing Capital Assets
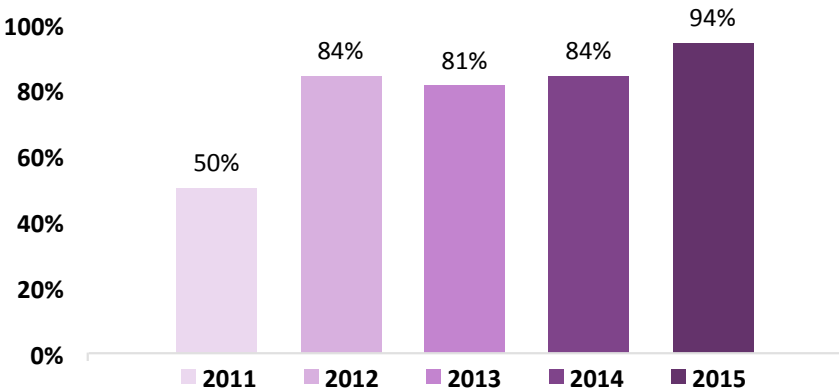
Chart 2.7D.1: Percent of Bay Channel Inspected 2011-2015

Chart 2.7E.1: Percent of Interstate Pavement in "Acceptable" Condition 2011-2015
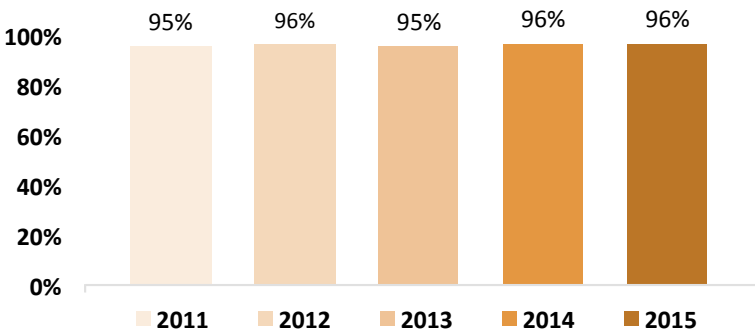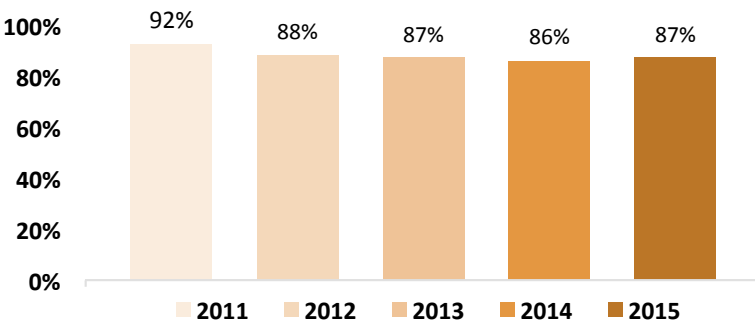

Chart 2.7F.1: Percent of Non-Interstate Pavement in "Acceptable" Condition 2011-2015

TANGIBLE RESULT DRIVER:
Corey Stottlemyer
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:
Pretam Harry
Motor Vehicle Administration (MVA)

PURPOSE OF MEASURE:
To track the timeliness and ability to match the budgets of the procurement process to be more efficient in contracts.

FREQUENCY:
Annually (in October)

DATA COLLECTION METHODOLOGY:
Focus reports MDOT wide showing all active BPO for the fiscal year.

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 2.8
Percent of Procurement on Time and on Budget

The purpose of this measure is to encourage all managers to proactively monitor and manage each of their procurements to make sure that they are in line with the project and budget in an effort to improve overall contracting efficiencies. Over time, managers will do a better job at setting timelines and budgets for projects. Managers will report the project status accurately and in a timely manner so that problems are identified early and corrective action taken swiftly.

While the trend is improving, we have not addressed underlying issues. The focus must remain on identifying those contracts with issues. The process improvement team is working to understand the systemic problems that prevent contracts that should have been closed in FY2016 from being closed.

PERFORMANCE MEASURE 2.8
Percent of Procurement on Time and on Budget

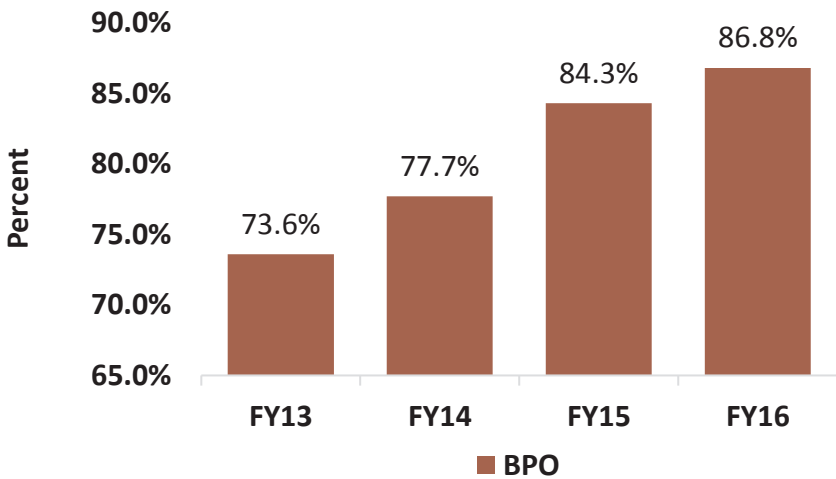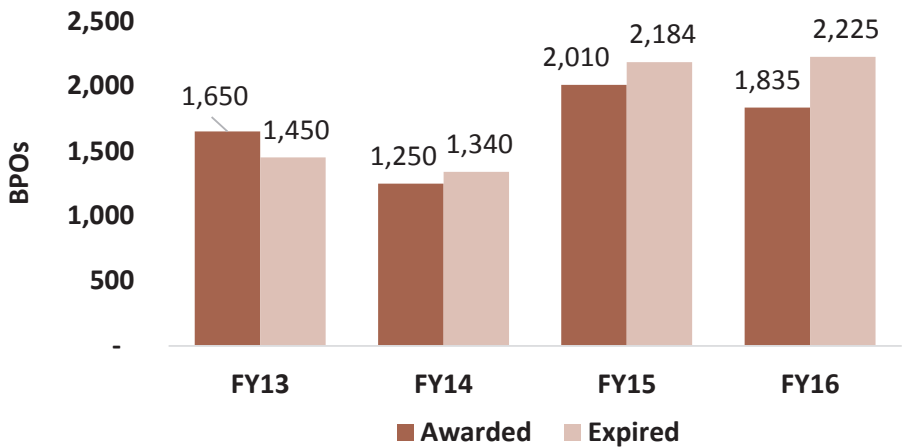**Chart 2.8.1: Percent of Blanket Purchase Orders (BPO) Expired FY2013-FY2016**

Percent
- FY13: 73.6%
- FY14: 77.7%
- FY15: 84.3%
- FY16: 86.8%

BPO

Chart 2.8.2: Number of Blanket Purchase Order (BPO) Awards and Expires FY2013-FY2016

BPOs
- FY13: Awarded 1,650 | Expired 1,450
- FY14: Awarded 1,250 | Expired 1,340
- FY15: Awarded 2,010 | Expired 2,184
- FY16: Awarded 1,835 | Expired 2,225

Awarded   Expired

TANGIBLE RESULT DRIVER:
Corey Stottlemyer
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:
Pretam Harry
Motor Vehicle Administration (MVA)

PURPOSE OF MEASURE:
To measure (a) the percent of occurrences and (b) the dollar value of unanticipated contract modifications on procurement contracts.

FREQUENCY:
Annually (in October)

DATA COLLECTION METHODOLOGY:
MDOT wide showing active unanticipated contract modifications equal to or greater than $1 million.

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 2.9
Percent and Value of Unanticipated Contract Modifications

The purpose of this measure is to encourage all managers to proactively monitor and manage each of their procurements to make sure that they are minimizing the value and amount of unanticipated contract modifications. In addition, it will encourage project staff to use timely and accurate reports that managers can analyze to examine trends in unanticipated contract modifications.

The amount and value of contract modifications will vary from one TBU to another depending on the type of project. For example, construction contracts, because of the uncertainties due to weather conditions or soil conditions, may require more contract modifications than building maintenance contracts. Similarly, an IT development contract may require more contract modifications than an IT maintenance contract.

Chart 2.9.1: Value of Unanticipated Contract Modifications MDOT-wide FY2015-FY2016
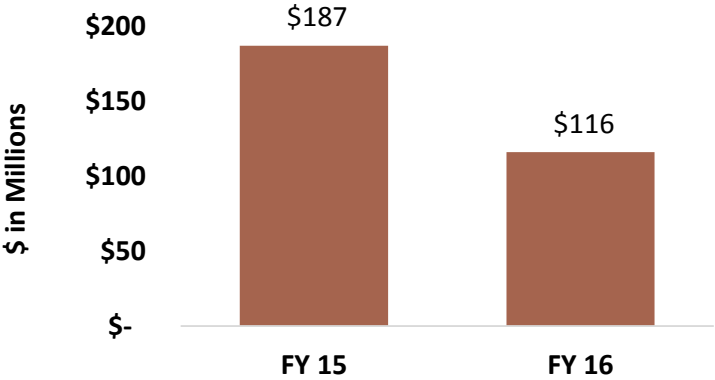
PERFORMANCE MEASURE 2.9
Percent and Value of Unanticipated Contract Modifications

Chart 2.9.2: Percent of Unanticipated Contract Modification Dollars Spent by TBU FY2015-FY2016
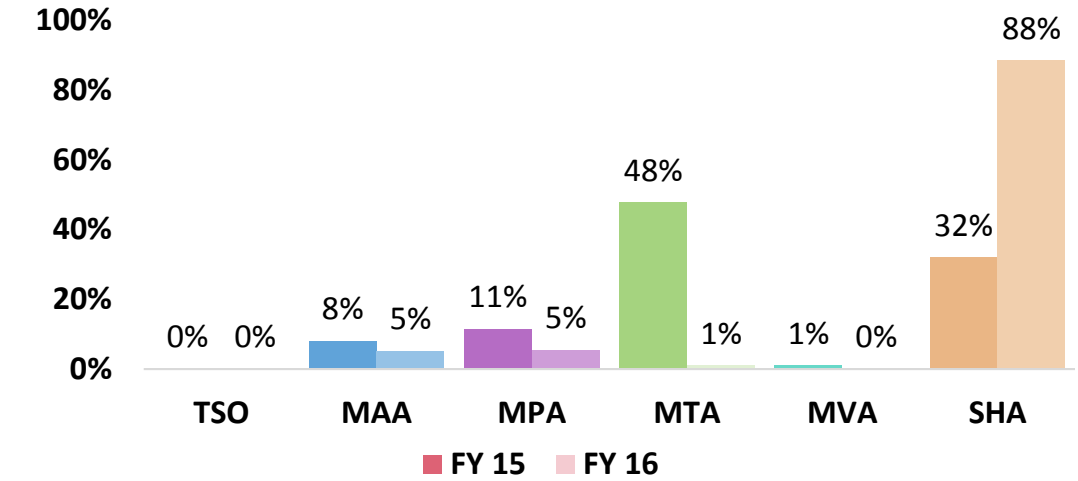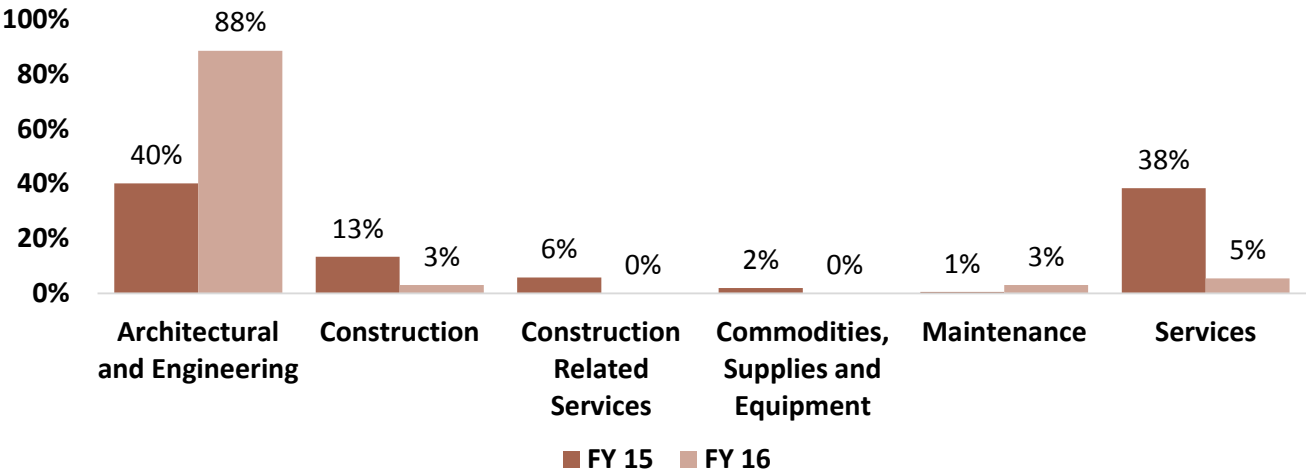

Chart 2.9.3: Percent of Unanticipated Contract Modification Dollars Spent by Category of Work in FY2015-FY2016

TANGIBLE RESULT DRIVER:
Corey Stottlemyer
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:
Laura Getty
Maryland Transit Administration (MTA)

PURPOSE OF MEASURE:
To understand how procurement competition impacts MDOT resources.

FREQUENCY:
Quarterly

DATA COLLECTION METHODOLOGY:
Data was collected on each TBU procurement contract over $200,000 during the second quarter of FY 2017. Sole source, emergency, and intergovernmental purchasing procurements were not included, as they have their own processes for determination. Procurement contract ID, number of bids, estimated cost and final contract amount were the data points.

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 2.10
Relationship Between Procurement Competition and Cost

Assessing the impact of procurement competitiveness on contract costs tests the belief that increased competition leads to a better price. It also tests MDOT's ability to accurately estimate and plan for costs. The data trend presents an opportunity to develop an MDOT-wide initiative to track cost estimates on procurement contracts and to evaluate the process for determining estimates.

The data continues to suggest that, as the number of bids increases, procurement contracts come in at or below cost estimate (-100 percent -0 percent). The procurements that increased in cost had a low number of bids. Seventeen percent of procurements this quarter were greater than 10% over estimated cost; 16% of procurements this quarter were greater than 15% under their estimated cost; and procurements greater than 10% over and 15% under both had three average number of bids.
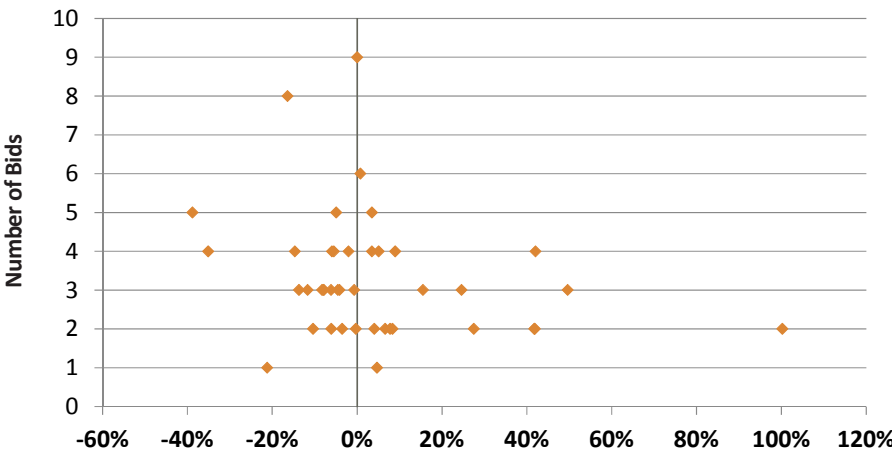
With a year of data now, the process improvement team is examining outliers by TBU and type of contract.

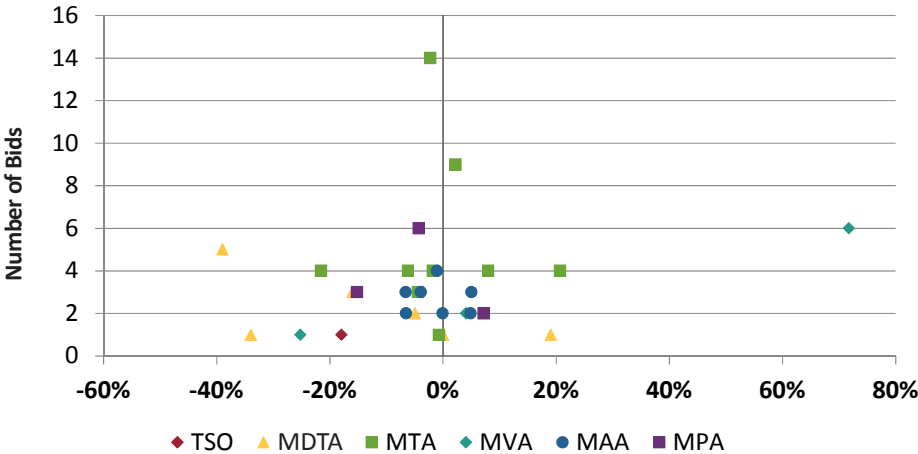**2.10.1: Percent Change from Estimated Cost to Final Contract Amount FY2017 2Q**
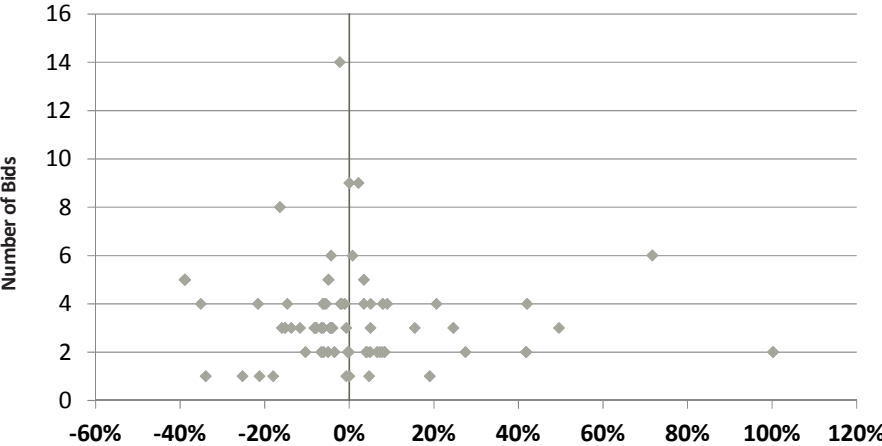
PERFORMANCE MEASURE 2.10
Relationship Between Procurement Competition and Cost

2.10.2 Percent Change from Estimated Cost to Final Contract Amount for SHA FY2017 2Q

2.10.3: Percent Change from Estimated Cost to Final Contract Amount for Other TBUs FY2017 2Q

TANGIBLE RESULT DRIVER:
Corey Stottlemyer
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:
Patrick Bradley
Maryland Aviation Administration (MAA)

PURPOSE OF MEASURE:
To monitor compliance with State and organizational operating processes and procedures each year by tracking the number of Internal Audit Findings and Repeat Internal Audit Findings.

FREQUENCY:
Annually (in October)

DATA COLLECTION METHODOLOGY:
Information collected from TBU audit databases.

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 2.11
Number of Internal Audit Findings and Number of Repeat Internal Audit Findings

Transparent, informative, and accurate financial reporting is essential for customers to have confidence in MDOT's ability to manage resources. Audits provide a window into current systems and areas for improvement.

Data will be presented by TBU in the number of audit findings and repeat audit findings on an annual basis. This will encourage MDOT and each TBU to avoid audit and repeat audit findings.

In FY 2013-2016, there were 627 total Internal Findings. The number of Repeat Internal Audit Findings totaled 32 in FY 2013 – FY2016, dealing with materials and supplies management (16 findings), fixed asset inventories (6 findings), promotional expense documentation and authorization (5 findings), MBE subcontractors reporting and compliance reviews (2 findings), and one finding each on the COMAR competitive bid process, overtime approvals not being documented and improper auto title lien documentation.

The materials and supplies management repeat audit findings include such items as segregation of duties, access to storeroom, non-signed receipts, perpetual inventory records not being accurate, documentation issues and inventory turning over less than three times per year.

Thirteen of thirty-two Repeat Internal Audit Findings have been resolved. Of the remaining unresolved nineteen Repeat Internal Audit Findings, thirteen are FY 2016 findings which are unresolved as the audit staff have not confirmed implementation of the changes. The remaining six items are three findings repeated in both FY 2013 and FY 2015 which are scheduled to be resolved Spring 2017.

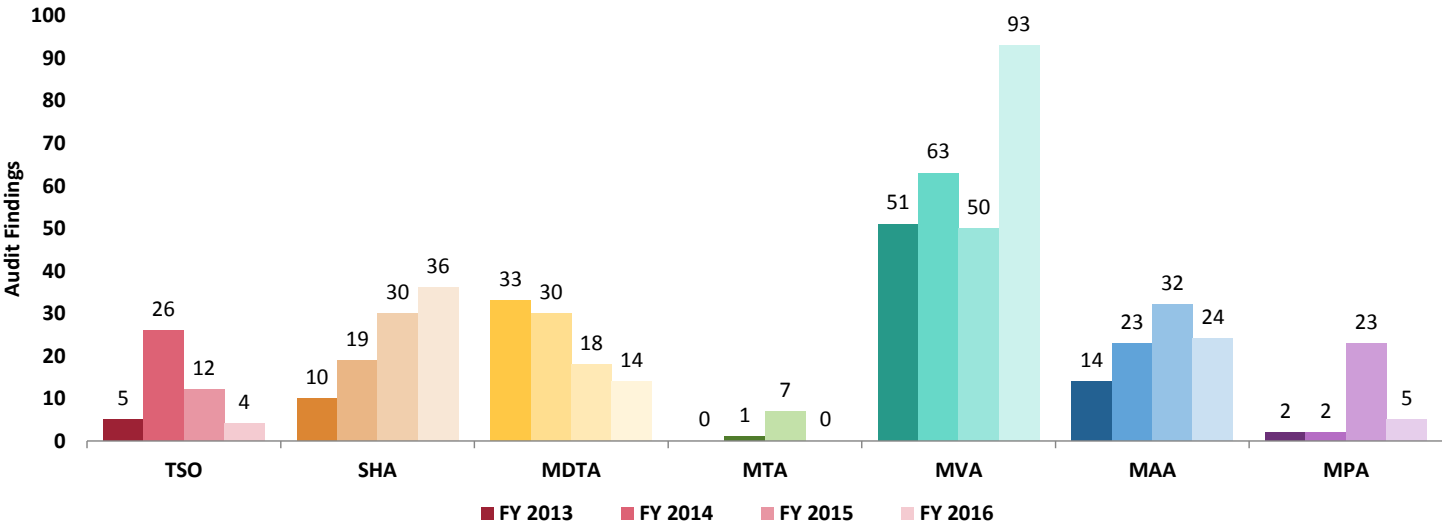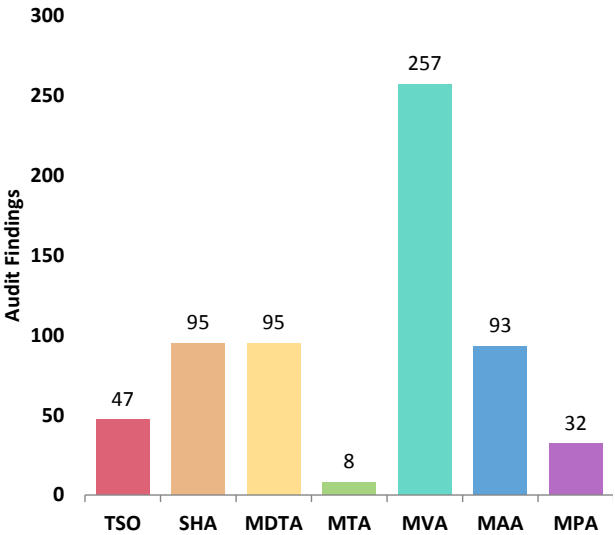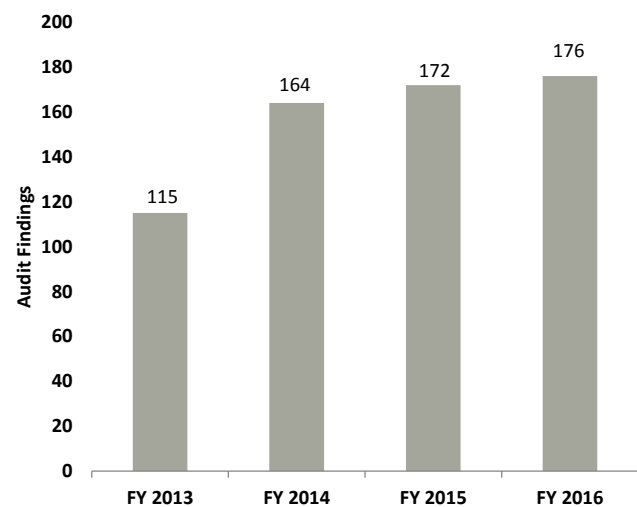**Chart 2.11.1: Number of Internal Audit Findings FY2013-FY2016**

Chart 2.11.2: Number of Total Internal Audit Findings by TBU FY2013-FY2016
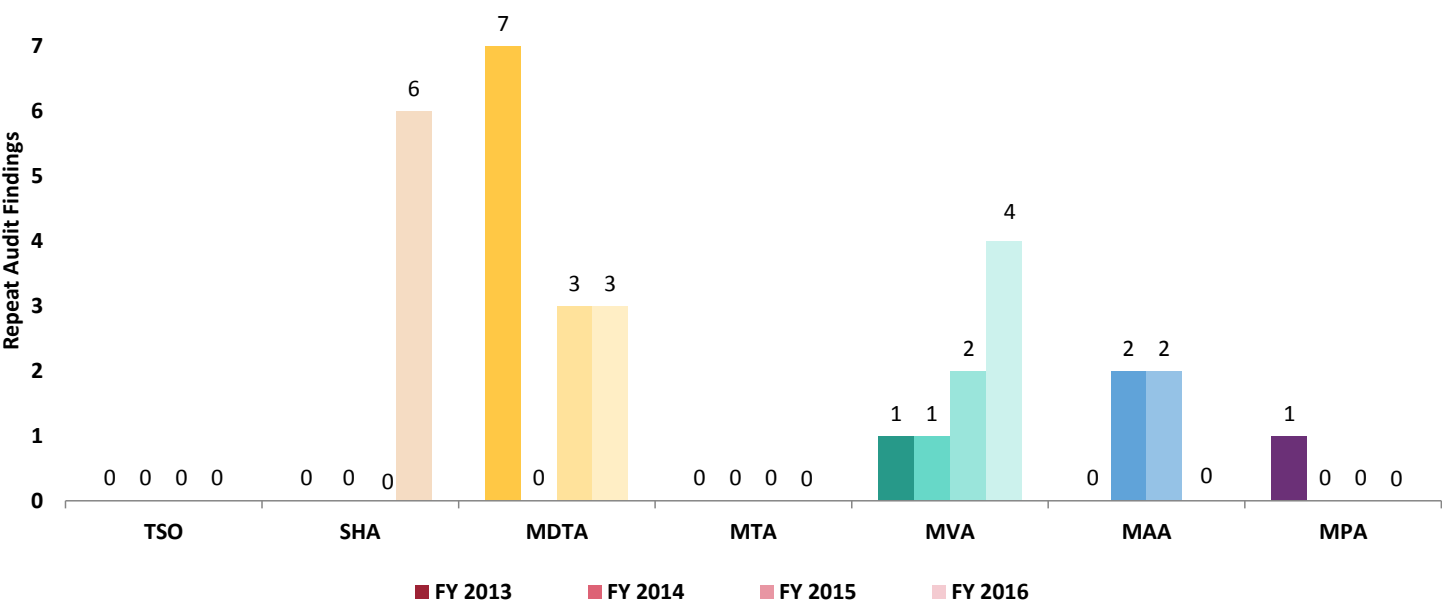
PERFORMANCE MEASURE 2.11
Number of Internal Audit Findings and Number of Repeat Internal Audit Findings

Chart 2.11.3: Total Internal Audit Findings FY2013-FY2016

Chart 2.11.4: Number of Internal Audit Repeat Findings FY2013-FY2016

TANGIBLE RESULT DRIVER:
Corey Stottlemyer
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:
Patrick Bradley
Maryland Aviation Administration (MAA)

PURPOSE OF MEASURE:
To monitor compliance with State and organizational operating processes and procedures each year by tracking the number of Legislative Repeat Audit Findings.

FREQUENCY:
Annually (in January)

DATA COLLECTION METHODOLOGY:
Information collected from TBU audit databases.

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 2.12
Number of Legislative Repeat Audit Findings

Transparent, informative, and accurate financial reporting is essential for our customers to have confidence in MDOT's ability to manage resources. Legislative audits provide an external view of our current systems and areas for improvement.

The purpose of this performance measure is to track the number of Legislative Repeat Audit Findings. Data will be presented MDOT-wide in the number of legislative repeat audit findings on an annual basis. This will encourage MDOT and each TBU to avoid Legislative Repeat Audit Findings.

In FY2013-FY2016 there were five total Office of Legislative Audit (OLA) Repeat Audit Findings dealing with proper internal controls over items purchased not being maintained, access to fare collection equipment and money rooms not being controlled, access controls to critical database security logs, files and transactions lacking, a lack of controls over critical virtual servers, and the process for determining the propriety of architectural and engineering contract billings not being comprehensive.

The five Legislative Repeat Audit Findings occurred in FY 2013 – FY 2015 and have been resolved. There were zero Legislative Repeat Audit Findings in FY 2016.

PERFORMANCE MEASURE 2.12
Number of Legislative Repeat Audit Findings

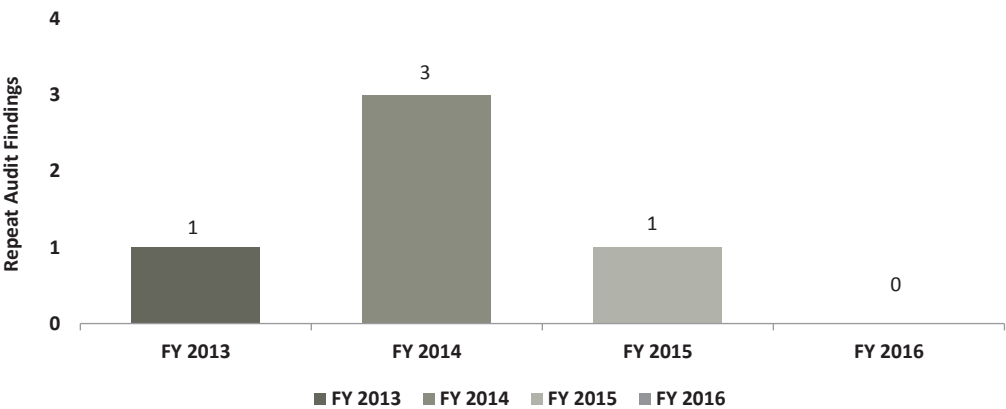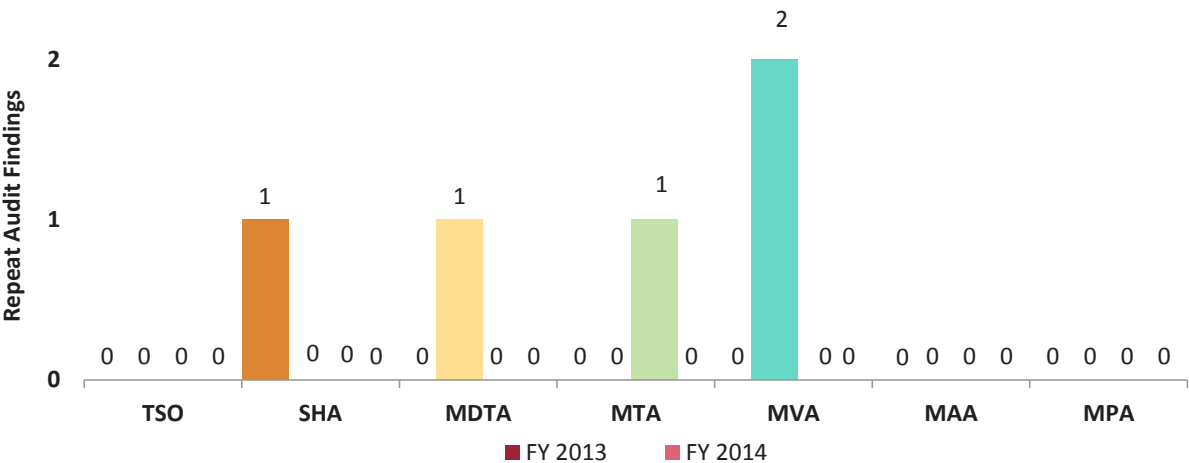**Chart 2.12.1: Number of Legislative Repeat Audit Findings FY2013-FY2016**

Y-axis: Repeat Audit Findings

- FY 2013: 1
- FY 2014: 3
- FY 2015: 1
- FY 2016: 0

Legend: ■ FY 2013 ■ FY 2014 ■ FY 2015 ■ FY 2016

Chart: 2.12.2: Number of Legislative Audit Repeat Findings by TBU FY2013-FY2016

Y-axis: Repeat Audit Findings

- TSO: 0 0 0 0, SHA: 1 0 0 0, MDTA: 0 1 0 0, MTA: 0 0 1 0, MVA: 0 2 0 0, MAA: 0 0 0 0, MPA: 0 0 0 0

Legend: ■ FY 2013 ■ FY 2014

TANGIBLE RESULT DRIVER:
Corey Stottlemyer
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:
Steven Watson
The Secretary's Office (TSO)

PURPOSE OF MEASURE:
To track the number of fraud hotline complaints investigated by MDOT, as well as the time to respond and develop effective resolutions.

FREQUENCY:
Quarterly

DATA COLLECTION METHODOLOGY:
The TBU Internal Audit Offices provide data compiled into a spreadsheet database tracking fraud hotline complaints by source and investigations still outstanding at the time of reporting.

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 2.13
Response to Fraud Hotline Complaints, including Response Time and Effective Resolution

MDOT must be responsive to complaints from customers. This performance measure tracks the number, response time, and effective resolution of fraud hotline complaints received or referred to MDOT. During the last quarter of 2016, there were 48 complaints, of which 12 were referred by the Office of Legislative Audits (OLA). MVA maintains a hotline through which 22 complaints were received during the period. Some elements of the data requested of the TBUs were not previously collected making this first collection effort more challenging. Strategically working with the TBUs, the completeness and consistency of the data collected will improve.

Generally, fraud hotline complaints are received by MDOT through two sources – direct contact, or referral by OLA. OLA maintains a widely publicized fraud hotline phone number and receives many complaints; some investigated by OLA, others are referred to the respective State agency to investigate. Direct contacts come via TBU hotlines, direct phone calls or letters.

PERFORMANCE MEASURE 2.13
Response to Fraud Hotline Complaints, including Response Time and Effective Resolution

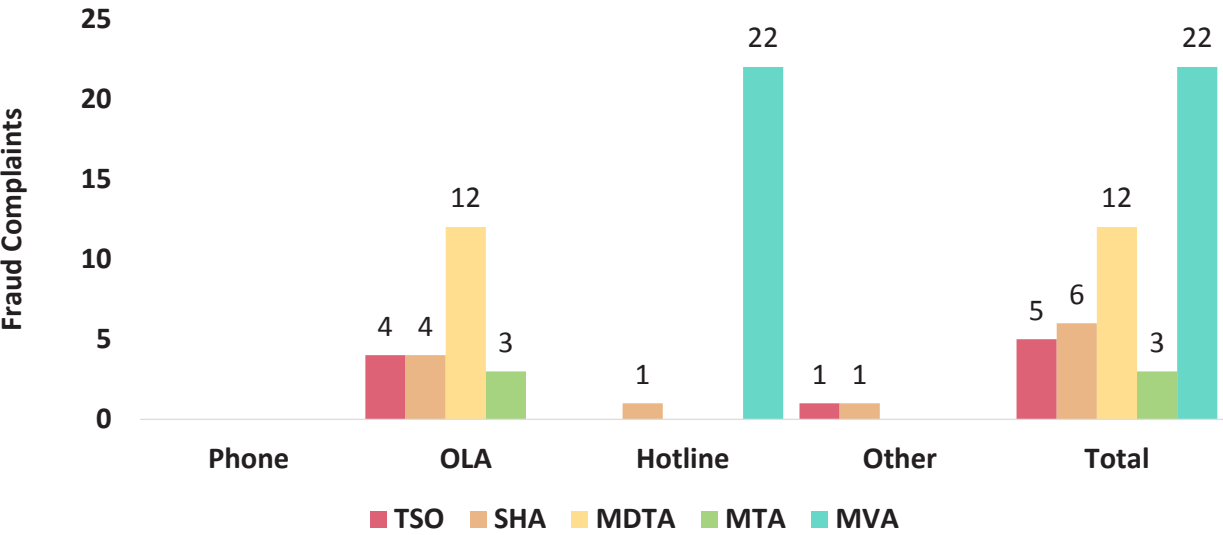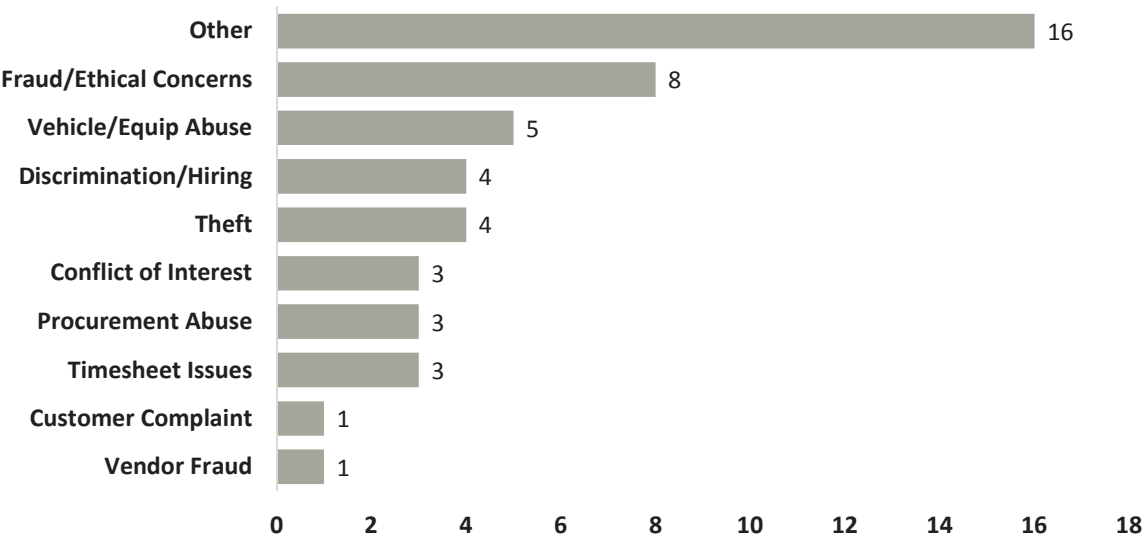**Chart 2.13.1: Fraud Complaints Received by Source and TBU FY17 2Q**

Legend: TSO, SHA, MDTA, MTA, MVA

Y-axis: Fraud Complaints (0 to 25)

X-axis categories: Phone, OLA, Hotline, Other, Total

OLA: 4, 4, 12, 3
Hotline: 1, 22
Other: 1, 1
Total: 5, 6, 12, 3, 22

Chart 2.13.2: Fraud Complaints Received by Type FY17 2Q

Type	Value
Other	16
Fraud/Ethical Concerns	8
Vehicle/Equip Abuse	5
Discrimination/Hiring	4
Theft	4
Conflict of Interest	3
Procurement Abuse	3
Timesheet Issues	3
Customer Complaint	1
Vendor Fraud	1

TANGIBLE RESULT DRIVER:
Corey Stottlemyer
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:
David Maier
The Secretary's Office (TSO)

PURPOSE OF MEASURE:
To ensure that when MDOT acquires properties that it takes steps to maintain value of the remaining portions.

FREQUENCY:
Annually (in October)

DATA COLLECTION METHODOLOGY:
A central MDOT database of properties will be tracked with attention to properties with buildings or other structures.

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 2.14
Rate of Return on Real Property

As MDOT acquires real property for a State transportation purpose, portions of those properties are deemed excess and can be sold. To maximize the return on investment, MDOT needs to ensure that when it acquires properties that it takes steps to maintain the value of the remaining unused portion.

A combined inventory and review of all MDOT properties is underway at TSO. Priority is being given to improved properties with buildings and other structures since these properties are most at risk if not maintained properly.